

Microanalytical Investigation in Ferrous Research.
III. Spectrochemical Investigation of Isolated
Structural Constituents in Steels, by W. Koch,
S. Rehner. UNCL

GERMAN, per. Arch Eisenhuettenwesen, Vol XXVII,
1956, pp 165-176.

British Iron and Steel Ind
(no number given)

Sci - Phys
Sep 59

98, 242

Determination of Hydrogen in Electric Steel,
by W. Celler, K. Zungardt, P. Hammerachid. UNCL

GERMAN, per, Arch Eisenhuettenwesen, Vol XXVII,
No 4, 1956, pp 235-240.

British Iron and Steel Ind
{no number given}

Sci - Chem
Sep 59

98,092

The Reactive Power of Three-Phase Current
Converters With Unsymmetrical Control, by
G. Moltgen. UNCL

GERMAN, per, Arch Eisenhuettenwesen, May 1956,
pp 272-285.

British Iron and
Steel Ind 1133

Sci - Min/Met
Apr 59

84,267

Quality Predictions on Liquid Cast Iron and Steel Based
on Optical Temperature Measurements, by K. Orths.

GERMAN, no per, Archiv Eisenhüttenwesen, Vol XXVII,
No 5, 1956, pp 289-295.

Bratcher Tr 3803
\$9.75

Sci - Min/Met

Jan 58

57,366

Inhibitory Effect of Aluminium Additions to
Hot-Dip Galvanizing Baths on the Forma-
tion of Iron-Zinc Alloy Layers, by D.
~~KRECHT~~ Horstmann, 5 pp.

GERMAN, per, Archiv fur das Eisenhüttenwesen,
Vol XXVII, No 5, 1956, pp 297-302.

CSIRO

Sci - Min/Met
Nov 61

174, 401

The Phase Diagram Ferrous Oxide-Aluminum Oxide,
by Wilhelm Anton Fischer, Alfred Hoffman, 14 pp.

GERMAN, per, Archiv fuer Eisenhuettenwesen, Vol XXVII
1956, pp 343-346.

ABC-UCRL-Tr-913(L)

Sci - Nucl Sci

Jul 63

*BISI 6068
NLL Ref: 9022.06 (6068)
238,155

Calculations of Output and Cost for Production
Planning of Iron and Steel works, by W. Bauer.
UNCL

GERMAN, par, Arch Eisenhuettenwesen, Vol XXVII,
No 5, 1956, pp 347-354.

British Iron and Steel Ind
(no number given)

Sci
USSR
Econ
Sep 59

98162

The Influence of Heat Treatment on the Machinability
of Heat Treated and Case Hardening Steels, by F.
Wever

GERMAN. ~~per~~ Arch Eisenhütten, Vol XXVII, No 6, 27 Jun
1956, pp 361-400.

ASLID-0895

Sci

Jul 59

92,752

Investigation of the Kinetics of Martensite Formation,
by Heinrich Beisswenger, Erich Scheil, 22 pp.

GERMAN, per, Archiv fuer Eisenmettenwesen, Vol XXVII,
1956, pp 413-420.

ABC-UCRL-P-883(L)

Sci - Nucl Sci

Jul 63

238,153

7
Tempering Phenomena in Martensite. Part I, by W. Jell
haus.

GERMAN, per, Archiv f. d. Eisenhüttenwesen, Vol XXVII,
No 7, 1956, pp 433-440.

Bratcher Tr 3876
\$14.60

Sci - Min/Met, tempering of steel

Jan 58

57,029

Simultaneous Determination of Low-Carbon and Nitrogen
Contents in Alpha-Iron by Damping Measurements, by
Wepner.

GERMAN, per, Arch Eisenhüttenwesen, Jul 1956, pp 449-
452.

Co-op Tr Sch Tr 657
(F2.15.0)

Sci - Min/met
Jan 58

57 711

Electrochemical Investigations on the
Effect of Roll and Heat Scale on the
Corrosion of Steel and on the Process
of Pickling, by F. Wever.

GERMAN, per, Archiv fuer Das Eisen-
hüttenwesen, Vol XXVII, No 7, 1956,
pp 475-486.

CSIRO

Sci - Min/Net

188,520

Mar 62

Decrease in Wuestite at Temperature Below 570° in
Presence of Iron, by W. A. Fischer, et al. UNCL

GERMAN, per, Arch Eisenhuettenwesen, Aug 1956,
pp 521-529.

SLA 62-14360
British Iron and
Steel Ind 1333

Sci - Min/Met
Nov 59

100,487

Testing of Un-Alloyed Steel Subjected to
Polyaxial Tension in Experiments Involving
Internal Pressure, Part I, Appearance of
Fracture in Specimens, by A. Kirsch.

GERMAN, per, Archiv fur das Eisenhüttenwesen,
Vol. XLVII, No 8, 1936, pp 531-537.

CSIRO

Sci - Min/Met
Aug 62

207, 425

Melting of High-Purity Iron by the Carbon
Reduction Process and Notch Toughness vs. Tempera-
ture Curves of This Iron, by W. A. Fischer,
H. Treppschuh, K. H. Köthemann.

GERMAN, per, Archiv Eisenhüttenwesen, Vol XXVII,
No 9, 1956, pp 567-572.

Henry Brucher

Tr No 3877

\$11.90

45,118

Sci - Min/Metals; Chemistry
Mar 1957 CTS/dex

Determination of the Size Distribution of Pores
in Refractory Materials and Glass Filters, Part
II, by L. Zagar.

GERMAN, per. Archiv Eisenhüttenwesen, Vol 27,
No 10, 1956. pp 657-663.

HB 7486

Sci-Mat

Sep 68

365,585

Thermodynamic Analysis. Part 7: The Dry Ice
Calorimeter, by Oelsen, W. and Others.

GERMAN, per, Archiv fur Das Eisenhutenwesen,
Vol XXVII, No 11, 1956, pp 689-694.

C.S.I.R.O.

Sci-Met

May 60

BCIRA 911 115,954

61-16320

Koch, W. and Malissa, H.
HIGHLY ACCURATE DETERMINATION OF CARBON
CONTENTS WITH A RECORDING CONDUCTIVITY
INSTRUMENT. Rept. no. 233 of the Chemical Com-
mittee of the V[erein] D[eutscher] E[isenhüttenleute].
[1957] [9]p. 16 refs.
Order from SLA \$1.10

61-16320

Trans. of Archiv für das Eisenhüttenwesen (West
Germany) 1956, v. 27, no. 11, p. 695-699.

DESCRIPTORS: *Carbon, Graphite, Determination,
*Cast iron, Conductivity, Microanalysis, Carbon di-
oxide, Combustion, Instrumentation

CO-OP Tr Sch Tr-773
(L2.15.0)

I. Koch, W.
II. Malissa, H.
III. Title: Verei...

175265

The Formation of a Cubic Nitride in Aluminium-
Containing Steels, by Koch, et al. UNCLASSIFIED

GERMAN, per, Arch Eisenhüttenwesen, Nov 1956,
pp 701-706.

Co-op Tr Scheme
Tr 900

SHA 61-18900

Sci - Min/Mat
Jun 58

64,690

Contribution to the Theory of the Scaling
of Pure Iron and of Scaling in General,
by H. G. Schmahl, et al.
GERMAN, per, Arch. Eisenh. Vol 27,
Nov 1956, pp 707-713.
BISI 4377

EE-Germany
Sci/M&M
Jan 66

294,625

Bunghardt, K. and Preisendanz, H.
DAMPING CAPACITY INVESTIGATIONS ON IRON-
CHROMIUM ALLOYS. [1957] [19] p. 28 refs.
Order from SLA \$1.60 61-16319

Trans. of ~~Archiv für das Eisenhüttenwesen~~ (West
Germany) 1956, v. 27, no. 11, p. 715-724.

DESCRIPTORS: *Iron alloys, *Chromium alloys,
*Damping, Stresses.

Co-op Tr Sch Tr-618

61-16319

I. Bunghardt, K.
II. Preisendanz, H.

175268

Office of Technical Services

(Metallurgy--Ferrous Metals, TT, v. 6, no. 3)

Rapid Determination of Iron in Slag (With an
Accuracy of $\pm 2\%$, Within 4 Minutes), by Kopinsck.
UNCLASSIFIED

GERMAN, per, Arch Eisenhuettenwesen, No 12,
1956, pp 753-760.

British Iron and
Steel Inst 739
(15.0.0)

Sci - Min/Met
Nov 58

76,329

AEC (ORNL-tr-2627) INVESTIGATION OF 475°-EM-
BRITTLEMENT OF IRON-CHROME ALLOYS. Bungardt, Kark;
Spyra, Wolfgang. 10Translated for Oak Ridge National Lab.,
Tenn., from 15Arch. Eisenhuettenw.; 27: No. 12, 777-86(1956).
172025p. 24Dep. NTIS.

26metallurgy; physics (solid-state); translations 2711F, 20L

28MN-25 29P NSA

Observations on the Change in State that
Leads to the 475° Embrittlement of Iron-
Chromium Alloys, by W. Koester, and von
Klenlin, A., 29 pp.

OKMAN, per, Arch Eisenhüttenw., Vol XXVII,
No 12, Dec 1956, pp 793-799. 29 pp.

SLA 2534

Sci

Aug 58

69, 880

Uncl ~~REC~~ (UCRL-Trans-1486(Pt.1)) INCORPORATION EXPERIMENTS IN SYNTHETIC MULLITE. PART I. Gelsdorf, Guenter; Schwiete, H.-E. Translated for Univ. of California Lawrence Berkeley Lab. from Arch. Eisenhuettenw.; 27: No. 12, 807-11(1956).

metallurgy

ND-25 P RC

Unlimited

Thermodynamic Analysis. Part 9: An Air or
Gas Calorimeter, by W. Gelsen.

GERMAN, per, Archiv fur Das Eisenhüttenwesen,
Vol XXVIII, 1957, pp 1-6.

C.S.I.R.O.

Sci-Mot

May 60

BCIRA 912

115, 958

Application of Complexometric Analysis in a Steelworks
Laboratory, by Wengler, Ausel. UNCLASSIFIED

GERMAN, per, Arch Eisenhüttenwesen, Vol XXVIII, Jan 1957,
pp 7-12.

Co-op Tr Scheme
Tr 792
(14.0.0)

Sci - Min/Metals
Apr 58

62,621

Study of Desulphurization in a Basic Bessemer Steel-
works, by Decker.

GERMAN, par, Arch Eisenhüttenwesen, Vol XXVIII, No 2,
1957, pp 57-64.

Co-op Tr Sch Tr 654
Co-op Tr Sch Tr 664

Sci - Engr
Jan 58

57,757

Determination of Small Contents of Aluminum in
Steel, II., by A. Neuberger, K. Schöffmann.

GERMAN, see Archiv Eisenhüttenwesen, Vol XXVIII,
No 2, 1957, pp 65, 66.

Henry Brucher
Tr 3934
\$2.90

Sci - Min/Metals
Aug 57

50,723

The Influence of Testing Machine Characteristics on the Shape of Stress/Strain Curves With Single or Repeated Drop in Loads, by A. Kochendorfer, W. Wink, 12 pp.

GERMAN, per, Archiv Eisenhütten, Vol XXVIII, No 2, 1957, pp 67-79.

Broken Hill Proprietary
Co Ltd (CRL/T.368)

Sci - Engr
Nov 61

174, 316
171, 316

New Process for Sampling Killed and Rimming Steel
for Determination of Oxygen and Hydrogen, by Schenck
et al.

GERMAN, per, Arch Eisenhüttenwesen, Vol XXVIII,
Mar 1957, pp 123-125.

Co-op Tr Sch Tr 630
(1.5.0)

57,703

Sci - Min/met
Jan 58

Solution of Some Problems of Fatigue Strength
by the Stop-Test Method, by Duhler, Schreiber.

BERMAN, par, Arch Eisenhüttenwesen, Vol XXVIII,
Mar 1957, pp 153-156.

Co-op Tr Serv Tr 588
(1.10.0)

Sci - Engr
Nov 57

55, 854

63-16877

I. Bockstiegel, G.

Bockstiegel, Gerhard.
THE INFLUENCE EXERTED BY THE INITIAL AND
BY REPRESSING PRESSURES AND THE SINTERING
TEMPERATURE ON THE PROPERTIES OF SIN-
TERED PARTS MADE WITH TECHNICAL IRON
POWDER (Einfluss des Vor- und Nachpressdruckes
sowie der Sintertemperatur auf die Eigenschaften von
Sinterteilen aus Technischem Eisepulvern). [1963]
34p. (foreign text included) 16 refs.
Order from SLA \$3.60

63-16877

Trans. of Archiv für das Eisenhüttenwesen (West
Germany) 1957, v. 28, no. 3, p. 167-177.

DESCRIPTORS: Powder metals, *Iron, *Powder metal-
lurgy, Sintering, Pressure, Temperature, Density,
Tensile properties, Failure (Mechanics), Electrical
conductance.

(Metallurgy, TT, v. 10, no. 8)

(over)

Office of Technical Services

Determination of Current Density-Potential Curves
in Conjunction With Electrolytic Isolation Using
an Electronic Potentiostat, by W. Koch, K. Luderig.

GERMAN, per, Archiv fuer Eisenhuettenwesen,
Vol XXVIII, Apr 1957, pp 201-205.

BIBI 2840

Sci - Min/Metals

also CRL/T 960
210.868

Sep 62

List 148

Effect of Final Annealing in a High Vacuum on the
Hysteresis of Hot and Cold Rolled Transformer
Sheets, by Lihl.

GERMAN, per, Arch Eisenhüttenwesen, Vol XXVIII,
No 4, 1957, pp 223-226.

Co-op Tr Sch Tr 570

Sci - Min/met
Jan 58

57,718

Calorimetric Investigations on the Kinetics of the
Isothermal Breakdown of Austenite of 12% Manganese
Steel, by G. Collette. UNCL

GERMAN, par, Arch Eisenhuettenwesen, Apr 1957,
pp 229-235.

British Iron and
Steel Ind 1060

Sci - Phys
Jan 59

SLA 61-12434

79,584

61-16305

Richard, K. and Reiner, Helmuth.
EXPERIMENTAL INSTALLATIONS AND PROCEDURES
Part 1 of Behaviour of Heat-Resistant Steels during
Creep Testing [at Temperatures] of 500-700°C. Apr 58
[15]p. 11 refs.
Order from SLA \$1.60

61-16305

Trans. of Archiv für das Eisenhüttenwesen (West
Germany) 1957, v. 28 [no. 5/6] p. 245-252.

DESCRIPTORS: *Heat resistant alloys, *Steel, *Creep,
Stresses, Tests, Test methods, Test facilities.

British Iron + Steel Inst

(Metallurgy--Ferrous Metals, TT, v: 6, no. 3)

I. Richard, K.
II. Reiner, H.
III. Title: Behaviour ...

175265

Office of Technical Services

<p>Hempel, M. LONG TIME FATIGUE TESTS ON A FERRITIC AND AN AUSTENITIC STEEL AT 500-650°C. Pt. 7 of Be- haviour of Heat-Resist[ant] Steels [during Creep Test- ing at Temperatures of] 500-700°C. [1958] [11]p. 44 refs. Order from SLA \$1.60</p> <p>Trans. of Archiv für das Eisenhüttenw[esen] (West Germany) 1957, v. 28 [no. 5/6] p. 311-316.</p> <p>DESCRIPTORS: *Heat resistant alloys, *Steel, *Austen- ite, *Creep, Fatigue (Mechanics), Tests, Stresses.</p> <p><i>British Iron + Steel Inst</i></p> <p>(Metallurgy--Ferrous Metals, TT, v. 6, no. 3)</p>	<p>61-16315</p> <p>I. Hempel, M. II. Title: Behaviour...</p> <p>17526</p> <p>Office of Technical Services</p>
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Behaviour of Heat-Resisting Steels During Creep
Testing at 500-700° C - Part III, by Jahn.

GERMAN, per, Arch Eisenhüttenwesen, Vol XXVIII,
May/Jun 1957.

British Iron and Steel Inst
~~Coop. to Beh. Pt 593~~

Sc1 - Engg Min/met
Jan 58

57,725

Behaviour of Heat-Resisting Steels During Creep Testing
at 500-700° C. Part IV - Results of Creep Tests on
Ferritic Engineering Steels, by Holmt, Grun.

GERMAN, per, Arch Eisenhüttenwesen, Vol XXVIII, May/Jun
1957, pp 269-285.

British Iron and Steel Inst
~~674~~

Sci - Min/met
Jan 58

57,664

Behaviour of Heat-Resisting Steels During Creep
Testing at 500-700° C. Part V - Results of
Creep Tests on Austenitic Steels and Alloys, by
HUNGARDT.

GERMAN, per, Arch Eisenhüttenwesen, Vol. 21, 1957,
XXVIII, May/Jun 1957, pp 287-304.

British Iron & Steel Inst
~~400-pp in Sch 2-675~~

Sci - Min/met
Jan 58

57,665
CSIRO

Behaviour of Heat-Resisting Steels During Creep
Testing at 500-700° C. Part VI - Metallurgical Ex-
aminations of Austenitic and Ferritic Steels After
a Long Period of Creep Stressing, by ~~Krtak~~ Krtak Kirsch.

GERMAN, per, Arch Eisenhüttenwesen, Vol XXVIII, May/
Jun 1957, pp 305-310.

British Iron & Steel Ind
~~Co. of Br. Sch. Tr. 676~~

Sci - Min/met
Jan 58

CSIR 57,667

Behaviour of Heat-Resisting Steel in Long-Period
Tests at 500-700° C. Part VII, by Hempel.

GERMAN, per, Arch Eisenhüttenwesen, Vol XXVIII,
May/Jun 1957,

British Iron & Steel Inst

~~Group 17 Sub-Gr 574~~

(£2.5.0)

Sci - Min/met
Jan 58

57, 685

Behaviour of Heat-Resisting Steels During Creep
Testing at 500-700° C. Part VIII - Some Preliminary
Deductions, by Schinn, ~~Rottmann~~
/RUTTMANN/

GERMAN, per, Arch Eisenhüttenwesen, Vol XXVIII,
May/Jun 1957, pp 317-323.

British Iron & Steel Inst
~~Co-ord. in Sch Tr~~ 677

Sci - Min/met
Jan 58

57666

61-16321

Thum, August and Richard, Kurt.
100,000: CREEP TESTS AT 500°C ON VARIOUS
TYPES OF STEEL. [1958] [24]p. 71 refs.
Order from SLA \$2.60

61-16321

I. Thum, A.
II. Richard, K.

Trans. of Arch[iv für das] Eisenhüttenwesen (West
Germany) 1957, v. 28 [no. 5/6] p. 325-337.

DESCRIPTORS: *Steel, Creep, Tests, Cast iron,
Austenite, Cast steel, Molybdenum alloys, Iron alloys.

British Iron + Steel Inst 175270

Kirsch, Alfred and Wepner, Wolfgang.
ON THE CONVERSION OF CREEP VALUES TO
OTHER TEMPERATURES. [1961] [13]p. 29 refs.
Order from SLA \$1.60 61-16323

Trans. of Arch[iv für das] Eisenhüttenwesen (West
Germany) 1957, v. 28 [no. 376] p. 339-344.

DESCRIPTORS: *Steel, Creep, Temperature.

Creep curves for 19 ferritic and 19 austenitic steels
were evolved by means of tests at two or more tem-
peratures and were compared by the process after
F. R. Larson and J. Miller. In most cases agreement
was had so that no success was had in plotting a
"master curve" for these steels, neither was it possi-
ble by changing the constant 20 in the formula after
Miller and Larson by substituting C in the parameter
 $L = 1.8 \cdot T(C + \lg t)$ where T = temperature in $^{\circ}\text{K}$, and
t = time in hours, particularly as, depending on the
stress selected, another constant would result. On the
(Metallurgy--Ferrous Metals, TT, v. 6, no. 3) (over)

61-16323

I. Kirsch, A.
II. Wepner, W.

*British Iron + Steel
Inst.*

175271

Office of Technical Services

The Influence of Chemical Composition and Structure on the ~~the~~ Hydrogen Content of Iron and Steel. Part I. The Influence of Silicon, Carbon and Structure on the Behaviour of Hydrogen in Unalloyed Steels, by F. Erdmann-Jesnitzer, H. Sabath, 24 pp.

GERMAN, par, Arch Eisenhüttenw, Vol XXVIII, 1957, pp 345-353.

AEC IGRL-T/C-95

HB-4136 30,871

Sci - Chem 26 Oct 60

Plastic Deformation and the Behaviour of
Hydrogen in the Formation of Flaws in Unalloyed
Steel, by F. Erdmann-Jesnitzer, 26 pp.

GERMAN, per, Arch Eisenhüttenw, Vol XXVIII,
1957, -- 355-365.

ABC IGIB-91 (RD/C)

Sci - Chem
14 Oct 60

128,912

Influence of Catalysts on the Reduction of Iron Ores
With Hydrogen, by W. Machu, S. Y. Ezz.

GERMAN, par, Archiv fuer das Eisenhuettenwesen, Vol
XXVII, No 7, 1957, PP 367-371.

Brutcher Tr 4067
\$7.25

Sci - Min/Met

Apr 58

61,437

Examination of Welded and Unwelded Chrome
Nickel Steels for Inter-crystalline Corrosion,
by H. Zitter. UNCL

GERMAN, per, Arch Eisenhüttenwesen, Jul 1957,
pp 401-416.

British Iron and Steel Ind 926

(19 15s.0d.)

Sci - Min/Int
May 59

85,801

Carbides and the Stress-to-Rupture Test of
Cr-Mo-V Steel, by Koch, et al.

GERMAN, per, Arch Eisenhüttenwesen, Vol XXVIII,
Aug 1957, p 445.

B151
~~Co op. Sec. 714~~

Sci - Min/met
Jan 58

57,637

Studies of the Structure of Steels With High
Contents of Carbide-Forming Alloying Elements,
by Schrader, et al. UNCLASSIFIED

GERMAN, per, Arch Eisenhüttenwesen, Aug 1957,
pp 461-468.

Co-op Tr Scheme

Tr 723
(14.15.0)

CSIRO

Sch - Min/Metals
Jnl 58

67,795

Further Investigations of the Dephosphorization
of Iron With Lime-rich Slags, by G. Tromel, H. W.
Fritze.

GERMAN, per, Archiv fuer Eisenhuettenwesen, Vol XXVIII,
Aug 1957, pp 489-495.

BCIRA 886

Sci

Jan 63

Measurements of Electric Resistance and
Thermoelectric Force Carried Out With Cr_2O_3
at Temperatures up to 1750°C , by W. A.
Fischer, G. Lorenz.

GERMAN, per, Archiv fur das Eisenhüttenwesen,
Vol XXVIII, 1957, pp 497-503.

CSIRO

Sci - Electricity
Jun 62

203,375

The Deformation Characteristics of
C.45 Steel in Compression and
Shearing as a Function of Temperature
and Rate of Deformation, by W. Lueg,
H. G. Muller.
GERMAN, per, Arch. Eisenh., Vol 28,
Aug 1957, pp 505-516.
BISI 4207

Sci/MGM
Jul 65

284,669

Calorimetric Examination of the $\alpha \rightarrow \beta$ Transformation of Cristobalite, by Krisement, et al.

GERMAN, per, Arch Eisenhüttenwesen, Vol XXVIII, Sep 1957, p 523.

Co-op Tr Sch Tr 713

Sci - Min/met
Jan 58

57,635

Contribution to Evaluation of the Welding Defects
Based on X-Ray Photographs and Stress and Strain
Experiments on Welded Samples, by Hermann Moller,
Max Hempel, 24 pp.

GERMAN, per, Arch Eisenhüttenw, Vol XXVIII, 1957, pp
531-541.

ABC 3301

Sci - Phys

Nov 58

76,437

Electrochemical Basis of the δ Isolation of
Structural Components in Steels, by W. Kech,
H. Sundermann. UNCL

GERMAN, Ger, Arch Eisenhuettenwesen, No 7, 1957,
pp 557-566.

British Iron and Steel Ind 1029
(L7 10s.0d.)

Sci - Min/Met
Jan 59

79,790

Studies of Structure and Adhesion of Scale on
Plain Carbon Steel Plates, by H. J. Engell,
F. K. Peters.

GERMAN, per, Archiv Eisenhüttenwesen, Vol
XXVIII, No 9, 1957, pp 567-574.

Henry Bratcher 4329
\$13.75

Ref - Engr
Oct 58

75,758

Studies of the Rate of Separation of Primary
Deoxidation Products From Liquid Iron, by
W. A. Fischer, et al.
GERMAN, per, Arch. Eisenh., Vol 28, No 10, 1957,
*HB 7170

Sci/Materials
Jun 67

Investigations of the Rate of Separation of
Primary Deoxidation Products from Liquid Iron,
by W. A. Fischer, M. Wahlster.
GERMAN, per, Archiv Eisenhüttenwesen, Vol 28,
No 10, 1957, pp 601-609.
HB 7170

Sci - Mech
Aug. 67

338,595

The Rate of Reduction of Iron Oxide With Hydrogen,
by L. Von Bogdandy, H. G. Riecke,

GERMAN, per, Archiv Eisenhüttenw., Vol XXIX,
No 10, 1958, pp 603-609.

CRL/T.958

Sci
Dec 62

Wetting Agents in Dust Techniques With Special
Regard to the Wetting of Finely Divided Iron
Oxides in Steelworks' Smoke, by R. Moldau. UNCL

GERMAN, per, Arch Eisenhuettenwesen, Oct 1957,
pp 615-621.

British Iron and
Steel Ind 1197
(LA 5a.08)

Sci - Min/Net
Apr 59

84,729

Determination of Small Titanium Contents
in Iron Alloys and Ores After Separation
of the Heavy Metals With Pyrrolidine
Dithiocarbamate, by E. Schoffman,
H. Maliss. UNCL

GERMAN, Ger, Arch Eisenhuettenwesen, No 10,
1957, pp 623-624.

British Iron and
Steel Ind 1128

Sci - Min/Met
Feb 59

80,268
OTS 61-18367

Quantitative Determination of Alloy Elements in
Steel, by X-Ray Fluorescent Spectro-Analysis, by
Krachter, Jager.

GERMAN, per, Arch Eisenhüttenwesen, Vol XXVIII,
Oct 1957, pp 633-639.

Co-op Tr Sch Tr 1958 797

x
Sci - Physics
Apr 58

60,779

Etching Procedure for Differentiating Be-
tween Chemically Resistant Cr-Ni Steels and
Cr-Ni-Mo Steels, by F. K. Naumann, W.
Carius.

GERMAN, per, Archiv Eisenhüttenwesen, Vol
XXVIII, No 10, 1957, pp 641-44.

Brutcher Tr 4231
\$4.60

Sci - Chem

Aug 58

68,211

Matz, Werner and Peter, Walter.
ON THE PROBLEM OF MAGNETIC AGING OF SOFT
STEEL. (Zur Frage der Magnetischen Alterung von
Weichem Stahl). [28p] (foreign text included) 22re/1s.
Order from SLA \$2.60 TT-64-18520

Trans. of Arch[iv] f[ür] d[as] Eisenhüttenw[esen]
(West Germany) 1957, v. 28, no. 10, p. 655-662
[Verein Deutscher Eisenhüttenleute (West Germany).
Berichte-1104]

(Metallurgy--Ferrous Metals, TT, v. 12, no. 7)

TT-64-18520

I. Matz, W.
II. Peter, W.
III. Verein ... Berichte-1104

TT-66-10434

Office of Technical Services

Arwidson, Sven and Bihet, O[scar] I[ouis].
ORGANIZATION AND TASKS OF THE SWEDISH
COMMITTEE ON HIGH-TEMPERATURE PROPERTIES
OF MATERIALS [AND] BELGIAN COMMITTEE FOR
THE ASSESSMENT OF THE CREEP STRENGTH OF
METALLIC MATERIALS AT ELEVATED TEMPERA-
TURES. Repts. on Organization of Researches into the
Long-time Creep Behaviour of Steel. [1958] [9]p.
2 refs.
Order from SLA \$1.10

61-16467

Trans. of Archiv für das Eisenhüttenwesen (West
Germany) 1957, v. 28, no. 11, p. 673-677.

DESCRIPTORS: *High temperature research, Creep,
*Refractory materials, Tests, *Steel; *Heat resistant
alloys, Belgium, Sweden.

(Metallurgy--Ferrous Metals, TT, v. 6, no. 4)

61-16467

- I. Arwidson, S.
- II. Bihet, O. I.
- III. Title: Belgian ...
- IV. Title: Organization ...

177661

CTS-839

Office of Technical Services

The Behaviour of Heat-Resisting Steels During Creep Testing at 500-700° C, II. Equipment and Technique for the Exact Determination of Creep and Fracture Behaviour at Elevated Temperatures Under Alternating and Varying Conditions of Load and Temperature.

GERMAN, per, Arch Eisenhüttenwesen, Vol XXVIII, Nov 1957, p 679-685.

~~Co-op Tr Ech Tr 840~~
British Iron and Steel Inst 240
Sci - Min/met
Apr 58

Schaar, K., Houdremont, E., and others.
EVALUATION OF LONG-TIME CREEP TESTS DIS-
CUSSION. [1961] [19]p. 18 refs.
Order from SLA \$1.60

61-16203

Trans. of Archiv [für das] Eisenhüttenwesen (West
Germany) 1957, v. 28, Nov, p. 687-694.

DESCRIPTORS: Creep, Stresses, *Steel, Tests

The discussions are presented that followed the pre-
sentation of a paper by Bandel and Gravenhorst (Arch.
Eisenhüttenw. 28: 253-258, 1957).

British Iron + Steel Inst 841

CSIRO

(Metallurgy--Ferrous Metals, TT, v. 6, no. 3)

61-16203

I. Schaar, K.
II. Houdremont, E.

175280

Office of Technical Services

61-16500

Constant, A[ndré].
RESULTS OF FRENCH CO-OPERATIVE INVESTIGA-
TIONS INTO THE PROPERTIES OF HEAT-RESISTANT
STEELS. Rept. on Results of Long-time Creep Tests on
Ferritic and Austenitic Steels. [1958] [13]p. 4 refs.
Order from SLA \$1.60 61-16500

I. Constant, A.
II. Title: Results ...

Trans. of Arch[iv für] das Eisenhüttenwesen (West
Germany) 1957, v. 28 [no. 11] p. 695-[702].

DESCRIPTORS: *Heat resistant alloys, *Steel, *Steel
castings, Creep, Tests.

177660

Office of Technical Services

(Metallurgy--Ferrous Metals, TT, v. 6, no. 4)

The Behaviour of Heat-Resisting Steels During Creep Testing at 500-700° C. IV. Results of French Co-operative Investigation Into the Properties of Heat-Resisting Steels, by Constant; Some Results of American Long-Time Creep Tests on Pipe/Steels, With Particular Reference to Permissible Design Stresses, by Eberle; Development of Heat-Resisting Materials and Their Testing in Czechoslovakia, by Pluhar; Influence of Nickel on Susceptibility to Embrittlement During Long-Time Creep Testing of Cast Cr-Mo and Cr-Mo-V Steels, by Felix; Variations in the Rate of Creep of a Plain Steel During Long-Time Creep Testing, by ~~Max~~ Johansson.

GERMAN, per, Arch Eisenhüttenwesen, Vol XXVIII, Nov 1957, pp 695; 702; 707; 710; 713. *B/S!*

~~Co-op Fr Sch Fr 842~~

60,840

Sci - Min/met Apr 58

Eberle, F.
SOME RESULTS OF AMERICAN LONG-TIME CREEP
TESTS ON PIPE STEELS, WITH PARTICULAR
REFERENCE TO PERMISSIBLE DESIGN STRESSES.
Rept. on Results of Long-time Creep Tests on Ferritic
and Austenitic Steels. [1958] [9]p.
Order from SLA \$1.10

61-16501

Trans. of Archiv für das Eisenhüttenwesen (West
Germany) 1957, v. 28, no. 11, p. 702-706.

DESCRIPTORS: *Steel tubing, Creep, Tests, Stresses,
*Heat resistant alloys, *Steel.

(Metallurgy--Ferrous Metals, TT, v. 6, no. 4)

61-16501

I. Eberle, F.
II. Title: Results ...

177667

Office of Technical Services

61-16533

Werner, P[elix].
INFLUENCE OF NICKEL ON SUSCEPTIBILITY TO
EMBRITTLEMENT DURING LONG-TIME CREEP-
TESTING OF CAST Cr-Mo AND Cr-Mo-V STEELS.
Rept. on Results of Long-time Creep Tests on Ferritic
and Austenitic Steels. [1958] [4]p.
Order from SLA \$1.10

61-16533

Trans. of Archiv für das Eisenhüttenwesen (West
Germany) 1957, v. 28, no. 11, p. 710-712.

DESCRIPTORS: *Cast steel, *Steel castings, *Heat
resistant alloys, Creep, Tests, Steel, Fracture
(Mechanics), *Nickel, Mechanical properties.

I. Werner, P.
II. Title: Results ...

177672

Office of Technical Services

(Metallurgy--Ferrous Metals, TT, v. 6, no. 4)

61-16503

Johansson, A[xc].
VARIATIONS IN THE RATE OF CREEP OF A PLAIN
STEEL DURING LONG-TIME CREEP-TESTING. Rept.
on Results of Long-time Creep Tests on Ferritic and
Austenitic Steels. [1958] 3p.
Order from SLA \$1.10

61-16503

Trans. of Archiv für das Eisenhüttenwesen (West
Germany) 1957, v. 28, no. 11, p. 712-713.

DESCRIPTORS: *Steel, Creep, Tests.

- I. Johansson, A.
- II. Title: Results ...

177668

Office of Technical Services

(Metallurgy--Ferrous Metals, TT, v. 6, no. 4)

61-16504

Murray, J. D., Bungardt, K. and others.
RESULTS OF LONG-TIME CREEP TESTS ON
FERRITIC AND AUSTENITIC STEELS: DISCUSSION
OF PAPERS SUBMITTED TO GROUP 4. [1958] 6p.
4 refs.

Order from SLA \$1.10

61-16504

Trans. of Archiv für das Eisenhüttenwesen (West
Germany) 1957, v. 28, no. 11, p. 713-715.

DESCRIPTORS: *Austenite, *Iron alloys, *Steel,
Creep, Tests, Temperature, Heat resistant alloys,
Tensile properties, Heat treatment.

I. Murray, J. D.
II. Bungardt, K.

177663

Office of Technical Services

(Machinery--Manufacturing, TT, v. 6, no. 4)

The ~~BE~~ Behaviour of Heat-Resisting Steels During Creep Testing at 500-700° C. V. Scatter in the Measurement of Long-Time Creep Data, by Schluter; Miniature Creep Tests and Their Evaluation, by K Kelle Stauffer; Statistical Evaluation of Results of Creep Tests as a Means of Establishing Minimum Design Data by Zachokke.

GERMAN, per, Arch Eisenhüttenwesen, Vol XXVIII, Nov 1957, pp 717; 719; 726.

~~Co-op Tr Sch Tr 843~~ 60, 841

Sci - Min/met
Apr 58

British Iron and Steel Ind (8/3)
(L 8/10.0)

61-16508

Richard, K., Sigwart, H. and others.
SCATTER OF RESULTS OF LONG-TIME CREEP
TESTS: DISCUSSION OF PAPERS SUBMITTED TO
GROUP 5. [1958] 3p. 2 refs.
Order from SLA \$1.10

61-16508

Trans. of Archiv für das Eisenhüttenwesen (West.
Germany) 1957, v. 28, no. 11, p. 729-730.

DESCRIPTORS: *Steel, Creep, Tests

I. Richard, K.
II. Sigwart, H.

177671

Office of Technical Services

(Metallurgy--Ferrous Metals TT, v. 6, no. 4)

61-16311

Eckhard, S. and Koch, W.
SPECTROGRAPHIC DETERMINATION OF TRACE
ELEMENTS IN STEEL WITH MOVING ELECTRODES.
Rept. no. 245 of the Chemists' Committee of V[erein]
D[eutscher] E[isenhüttenleute]. [1961] [17] p. 29 refs.
Order from SLA \$1.60 61-16311

Trans. of Archiv für das Eisenhüttenwesen (West
Germany) 1957, v. 28, no. 11, p. 731-738 [Max Planck
Institut für Eisenforschung (West Germany). Communi-
cation 743].

DESCRIPTORS: *Steel, Spectrographic analysis,
*Electrodes, Impurities.

By employing a 1.5 m-grating spectrograph and a high
tension A.C. arc with 4400 V it was possible to lower
the detection limit for aluminum and manganese in pure
iron from 0.0004 to 0.0001% Al and from 0.009 to
0.003% Mn by movement of the electrodes. (Author)

(Metallurgy--Ferrous Metals, TT, v. 6, no. 3)

- I. Eckhard, S.
- II. Koch, W.
- III. Max Planck Institut für
Eisenforschung
(West Germany)
- IV. Title: Verein...

175266
British Iron + Steel
Inst. Tr 803
FDD/x-2495

Microanalytic Investigations in Iron Research. Part
III. Application of Microgram Quantities in Metal-
lographic Investigations, by Walter Koch, Hans Malissa,
Dagmar Ditges. UNCLASSIFIED

GERMAN, per, Arch für das Eisenhüttenwesen, Vol XXVIII,
No 12, 1957, pp 1-10.

*Navy Tr/NRL (not yet numbered)

Sci - Min/met
Dec 58

The Mottling of Tinplate, by Eggers, by
UNCLASSIFIED

GERMAN, per, Arch Eisenhüttenwesen, Dec 1957,
pp 777-783.

Iron and Steel Inst Tr 816
(L3.5.0)

Sci - Min/Met
Aug 58

71, 718

Microanalytical Investigations in Ferrous
Metallurgical Research III. Handling
Microgram Quantities in Metallurgical Investigation
by Koch, et al. UNCL

OXFORD, 90F, Arch Hienhuetterman, Dec 1957,
pp 785-794.

British Iron and
Steel Ind 80, 781

801 - Mic/Met; Phys
Jan 59

also Navy Tr 2406/NEL
9676258 768

Separation de Precipites Peu Solubles, a Partir
de Solutions Tres Diluees, by Carl Mahr,
Horst Klumberg, 30 p.

GERMAN to FRENCH, per, Arch Eisenhutten, 1957,
Vol XXVIII, No 12, pp 795-800.

CEA-tr-A569

Sci
Feb 60
Vol 2, No 10

The Transformation Characteristics of 12-14%
Chromium Steels, by W. Peter, W. Mitz. UNCL

GERMAN, per, Arch Eisenhuettenwesen, Dec 1957,
pp 807-823.

British Iron and
Steel Ind 1197
(19 10s.00.)

Sci - Mla/Mat
May 59

SLA 61-20595

86, 819

Studies of Formation of Nonmetallic Inclusions
in the Decarburization [of Steel] With Silicon,
by W. A. Fischer, and M. Wahlster.

RE CHEN, for, Archiv Eisenhüttenwesen, Vol
XXX, No 1, 1958, pp 1-9.

Henry Bratcher 4416
\$8.90

Sci - Chem

Jan 79

79,599

Operating Experience With Flame Spectrometers in
the Determination of Calcium and Magnesium in Steel
Works Laboratories, by K. Abresch, W. Dobner.

COMMON, per, Archiv fuer Eisenhuettenwesen,
Vol XLIX, Jan 1978, pp 27-34.

ENRI 3871

Sci - Min/Metals

168,489

Aug 61

11pt 109

A Theoretical Analysis of the Excessively
High Temperatures Occuring During the
Scaling of Pure Iron, by H.G. Schmahl,
H. Baumann, et al.
GERMAN, per, Arch. Eisenh., Vol 29,
Jan 1958, pp 41-46.
BISI 4239

Sci/MEM
Sep 65

389,346

Influence of Grain Transformation on Grain
Size and Structure of Ferrite and Austenite
in Plain 0.15% Carbon Steel, by H. Borchers,
G. Boxhorn, 17 p.
GERMAN, per, Archiv fuer das Eisenhuettenwesen,
Vol 29, No 1, 1958, pp 47-56.
SIA TT-66-10586

Sci-M&M
Jul 66

306,077

Contribution to the System Ferrous Oxide,
Ferrous Sulphide, Manganous Oxide, Manganous
Sulphide, by K. Geissler, E. J. Kohlmeier.
UNCLASSIFIED

GERMAN, per, Arch Eisenhuettenwesen, No 1,
1958, pp 57-63.

British Iron and
Steel Ind 1043

Sci - Chem
Nov 58

76,023

Eutectoid Migration in Transformation Structure of
Low and Medium Alloy Heat-Resisting Steels, by
H. Pusch, H. J. Schueller. UNCL

GERMAN, per, Arch Eisenhuettenwesen, Jan 1958,
pp 65-72.

British Iron and Steel Ind
1067

Sci - Min/Met
Jan 59

SLA 61-18380

79,817

Considerations Electrochimiques sur les Reactifs
Metallographiques, by Hans Jurgen Engell, 16 p.

GERMAN to FRENCH, per, Arch Eisenhutenwesen, 1958,
Vol XXIX, No 1, pp 73-76.

CEA-tr-A516

Sci

Feb 60

Vol 2, No 10

The Temperature Dependence of Scaling
of Pure Iron in Oxygen, by N.G. Schmahl,
H. Baumann, et al.
GERMAN, per, Arch. Eisenh., Vol 29,
Feb 1958, pp 83-88.
BISI 4238

Sci/M&M
Sep 65

389,345

The Influence of Temperature on the Oxidation of
Pure Iron in Oxygen, by N. G. Schmahl, H. Baumann,
H. Schenck, 21 pp.

GERMAN to FRENCH, per, Arch Eisenhüttenw, Vol XXIX,
1958, pp 83-88.

CEA Tr A-528.

Sep 59

CRL/T 2186

The Spectro-Chemical Determination of Phosphorus
in Steel With the Phosphorus Line 3175 Å, by
S. Eckhardt. USCL

OSWALD, per, Arch Eisenhuettenwesen, Feb 1958,
pp 89-94.

British Iron and
Steel 1315
(15 5s.0s.)

Sci - Chem; Phys
May 59

SLA 61-20591

86,779

The Decomposition of Wustite in the Presence
of Metallic Iron After Quenching to Temperatures
Below 570°C, by W. A. Fischer, A. Hoffmann. UFGI

GERMAN, per, Arch Eisenhuettenwesen, Feb 1958,
pp 107-113.

SLA 62-14362

BIAS 1332

(15 6s.(18,))

Sci - Min/Mat
Oct 59

99,608

Theory of Counter Tubes With a Newly Designed
Specimen Holder for the Determination of Textures
in Quantitative Pole Figures, by J. Grewen, et al.
UNCL

GERMAN, per, Arch Eisenhüttenwesen, Feb 1958,
pp 115-118.

British Iron and
Steel Ind 1196

Sci - Min/Met
Sep 59

96,353

Representation de textures en diagrammes polaires
quantitatifs par la methode du tube-compteur, a
l'aide d'un nouveau porte-objets, by J. Grewen,
A. Segmuller, et al, 16 pp.

GERMAN to FRENCH, per, Arch Eisenhüttenwes,
Vol XXIX, No 2, 1958, pp 115-118.

Reverse Translation
CEA-A-1348

Sci
Feb 64

The Rate of Scaling of Pure Iron in Oxygen at
Reduced Pressures and in Carbon Dioxide, by
H. G. Schmahl, et al. UNCLASSIFIED

GERMAN, per, Arch Eisenhuettenwesen, No 3, 1958,
pp 147-152.

British Iron and Steel Ind 1036
(13.10.0)

Sci - Min/Mat
Dec 58

78,433